New Flexible review

Protocol information

Authors

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Contact person

[Empty name]

Dates

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What's new

Date / Event	Description

History

Date / Event	Description

Background

Objectives

Acknowledgements

Contributions of authors

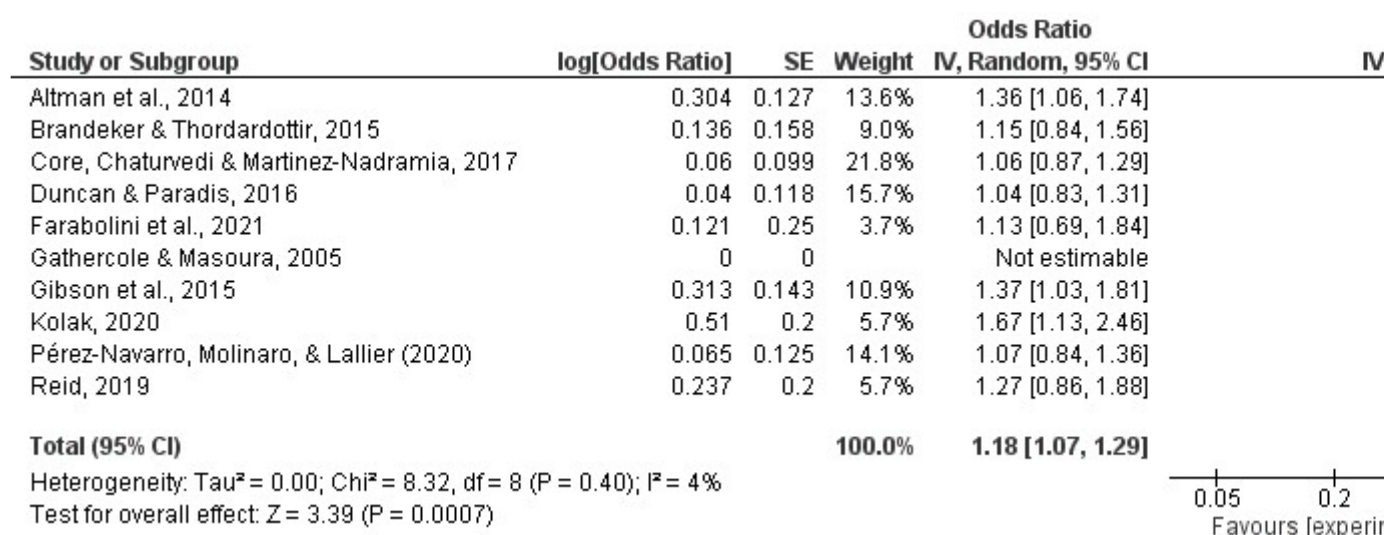# Declarations of interest

Published notes

Additional tables

Other references

Additional references

Other published versions of this review

Figures

Figure 1 (Analysis 1.3)

Study or Subgroup	log[Odds Ratio]	SE	Weight	Odds Ratio IV, Random, 95% CI
Altman et al., 2014	0.304	0.127	13.6%	1.36 [1.06, 1.74]
Brandeker & Thordardottir, 2015	0.136	0.158	9.0%	1.15 [0.84, 1.56]
Core, Chaturvedi & Martinez-Nadramia, 2017	0.06	0.099	21.8%	1.06 [0.87, 1.29]
Duncan & Paradis, 2016	0.04	0.118	15.7%	1.04 [0.83, 1.31]
Farabolini et al., 2021	0.121	0.25	3.7%	1.13 [0.69, 1.84]
Gathercole & Masoura, 2005	0	0		Not estimable
Gibson et al., 2015	0.313	0.143	10.9%	1.37 [1.03, 1.81]
Kolak, 2020	0.51	0.2	5.7%	1.67 [1.13, 2.46]
Pérez-Navarro, Molinaro, & Lallier (2020)	0.065	0.125	14.1%	1.07 [0.84, 1.36]
Reid, 2019	0.237	0.2	5.7%	1.27 [0.86, 1.88]
Total (95% CI)			**100.0%**	**1.18 [1.07, 1.29]**

Heterogeneity: Tau² = 0.00; Chi² = 8.32, df = 8 (P = 0.40); I² = 4%
Test for overall effect: Z = 3.39 (P = 0.0007)

0.05   0.2
Favours [experir

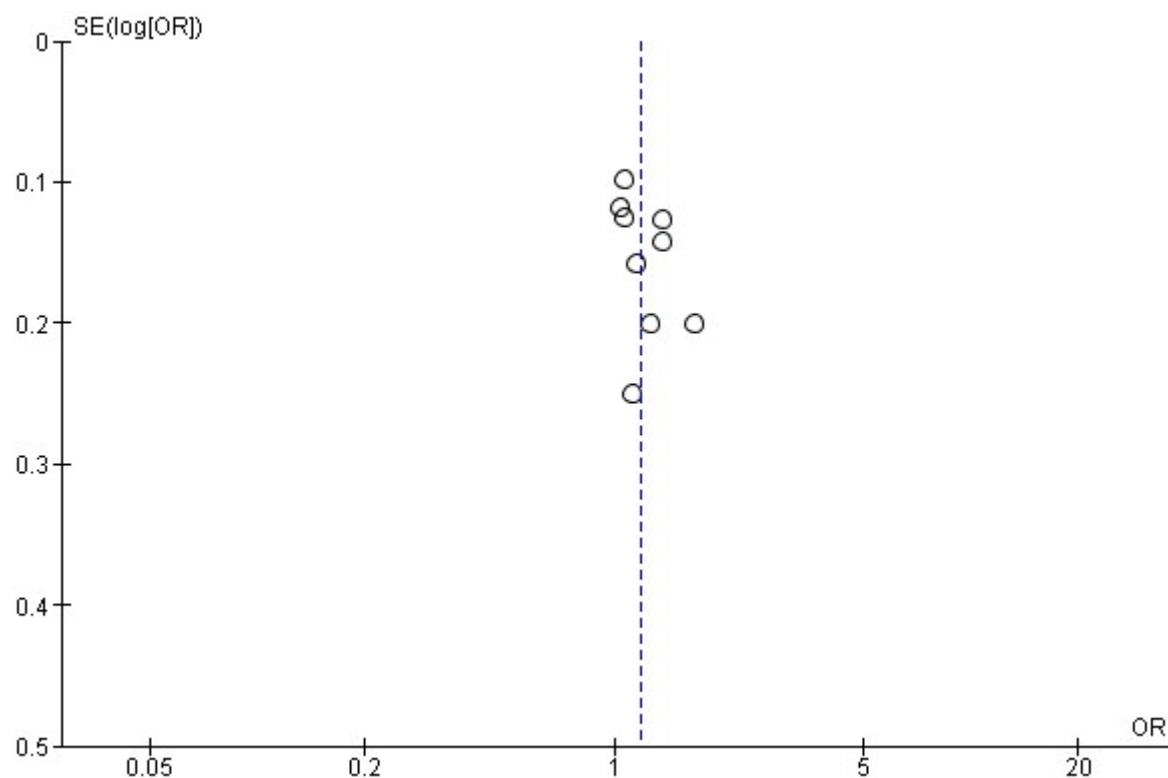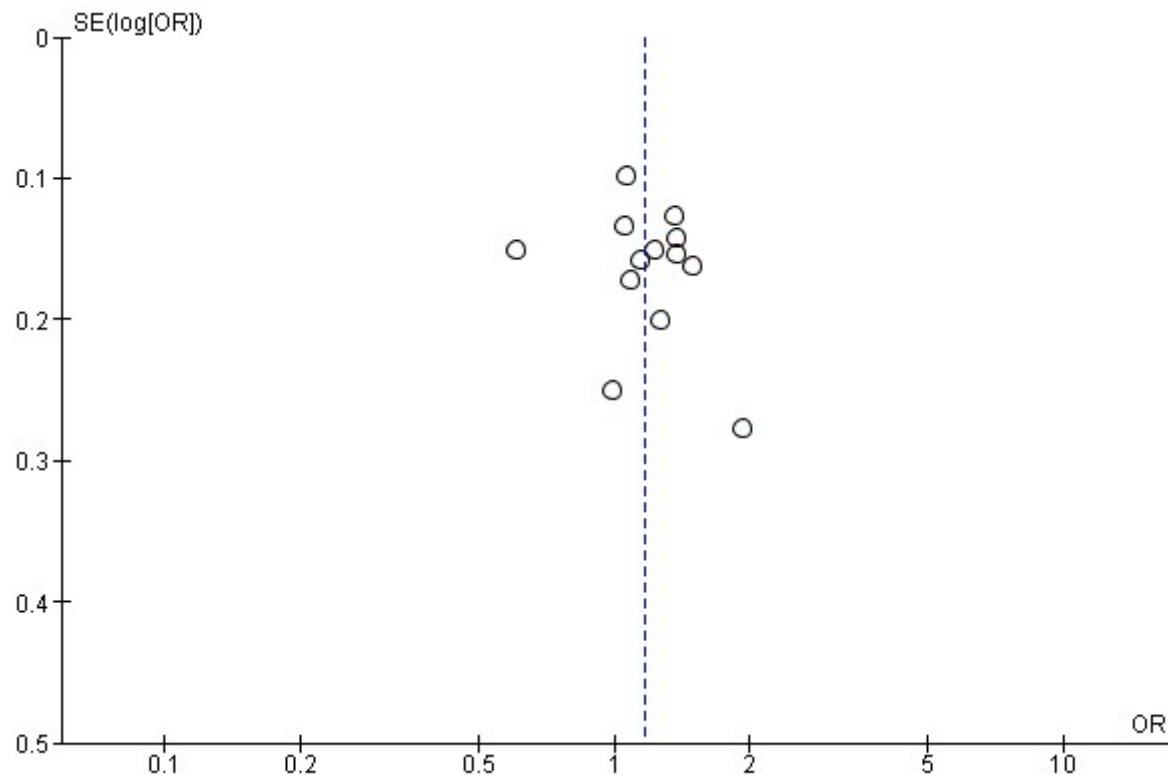Forest plot of comparison: 1 Nonword repetition and language exposure, outcome: 1.3 NWR & Cumulative exposure.
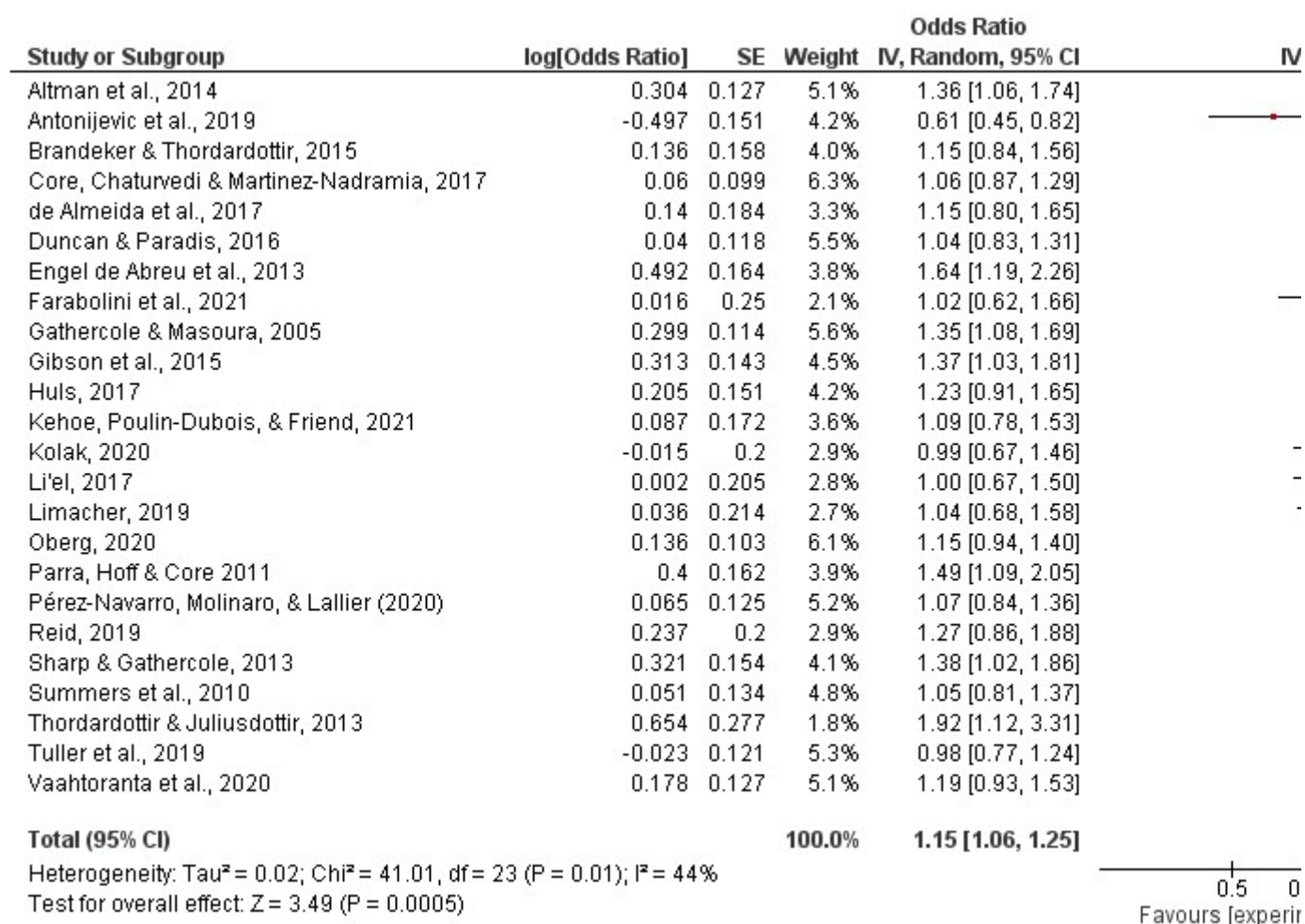
Figure 2 (Analysis 1.3)

Funnel plot of comparison: 1 Nonword repetition and language exposure, outcome: 1.3 NWR & Cumulative exposure.
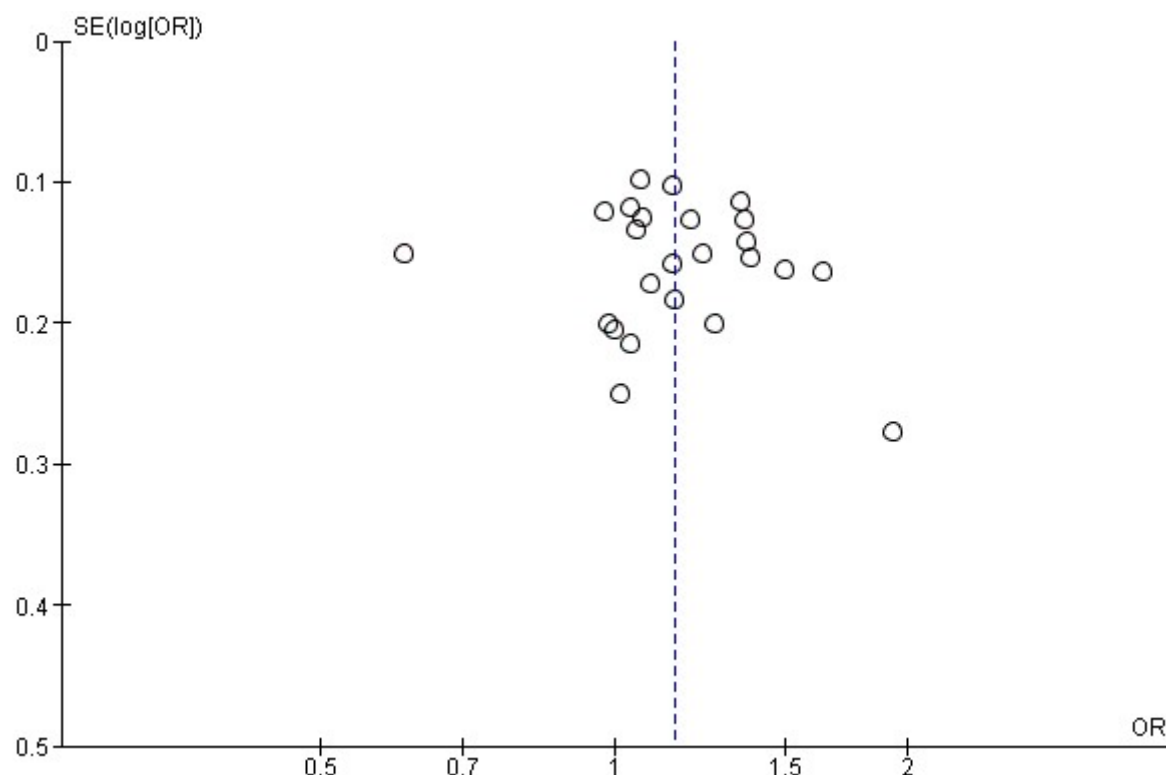
Figure 3 (Analysis 1.9)

Funnel plot of comparison: 1 Nonword repetition and language exposure, outcome: 1.9 LE & NWR with phoneme scoring.

Figure 4 (Analysis 1.2)

Study or Subgroup	log[Odds Ratio]	SE	Weight	Odds Ratio IV, Random, 95% CI
Altman et al., 2014	0.304	0.127	5.1%	1.36 [1.06, 1.74]
Antonijevic et al., 2019	-0.497	0.151	4.2%	0.61 [0.45, 0.82]
Brandeker & Thordardottir, 2015	0.136	0.158	4.0%	1.15 [0.84, 1.56]
Core, Chaturvedi & Martinez-Nadramia, 2017	0.06	0.099	6.3%	1.06 [0.87, 1.29]
de Almeida et al., 2017	0.14	0.184	3.3%	1.15 [0.80, 1.65]
Duncan & Paradis, 2016	0.04	0.118	5.5%	1.04 [0.83, 1.31]
Engel de Abreu et al., 2013	0.492	0.164	3.8%	1.64 [1.19, 2.26]
Farabolini et al., 2021	0.016	0.25	2.1%	1.02 [0.62, 1.66]
Gathercole & Masoura, 2005	0.299	0.114	5.6%	1.35 [1.08, 1.69]
Gibson et al., 2015	0.313	0.143	4.5%	1.37 [1.03, 1.81]
Huls, 2017	0.205	0.151	4.2%	1.23 [0.91, 1.65]
Kehoe, Poulin-Dubois, & Friend, 2021	0.087	0.172	3.6%	1.09 [0.78, 1.53]
Kolak, 2020	-0.015	0.2	2.9%	0.99 [0.67, 1.46]
Li'el, 2017	0.002	0.205	2.8%	1.00 [0.67, 1.50]
Limacher, 2019	0.036	0.214	2.7%	1.04 [0.68, 1.58]
Oberg, 2020	0.136	0.103	6.1%	1.15 [0.94, 1.40]
Parra, Hoff & Core 2011	0.4	0.162	3.9%	1.49 [1.09, 2.05]
Pérez-Navarro, Molinaro, & Lallier (2020)	0.065	0.125	5.2%	1.07 [0.84, 1.36]
Reid, 2019	0.237	0.2	2.9%	1.27 [0.86, 1.88]
Sharp & Gathercole, 2013	0.321	0.154	4.1%	1.38 [1.02, 1.86]
Summers et al., 2010	0.051	0.134	4.8%	1.05 [0.81, 1.37]
Thordardottir & Juliusdottir, 2013	0.654	0.277	1.8%	1.92 [1.12, 3.31]
Tuller et al., 2019	-0.023	0.121	5.3%	0.98 [0.77, 1.24]
Vaahtoranta et al., 2020	0.178	0.127	5.1%	1.19 [0.93, 1.53]
Total (95% CI)			100.0%	1.15 [1.06, 1.25]

Heterogeneity: Tau² = 0.02; Chi² = 41.01, df = 23 (P = 0.01); I² = 44%
Test for overall effect: Z = 3.49 (P = 0.0005)

Forest plot of comparison: 1 Nonword repetition and language exposure, outcome: 1.2 NWR & LE main effect.
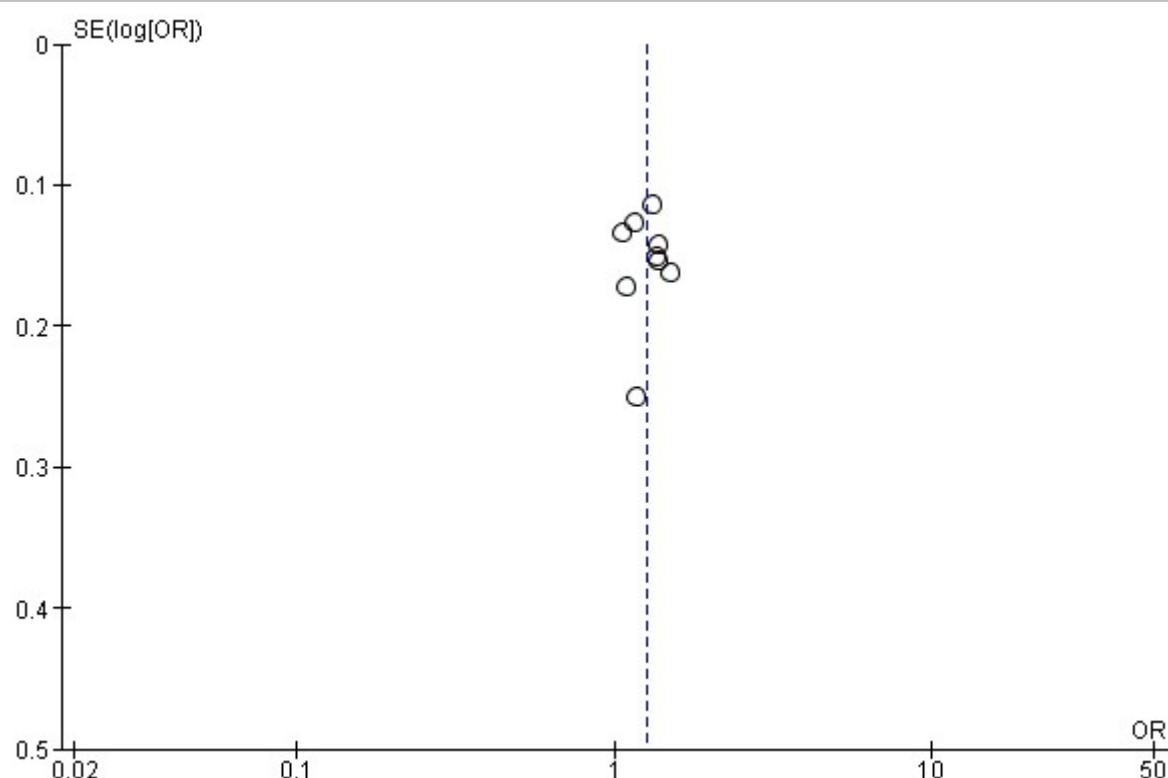
Figure 5 (Analysis 1.2)

Funnel plot of comparison: 1 Nonword repetition and language exposure, outcome: 1.2 NWR & LE main effect.

Figure 8 (Analysis 1.4)

Study or Subgroup	log[Odds Ratio]	SE	Weight	Odds Ratio IV, Random, 95% CI	Odds IV, Rand
Farabolini et al., 2021	0.165	0.25	3.8%	1.18 [0.72, 1.93]	—
Gathercole & Masoura, 2005	0.282	0.114	18.4%	1.33 [1.06, 1.66]	
Gibson et al., 2015	0.313	0.143	11.7%	1.37 [1.03, 1.81]	
Huls, 2017	0.308	0.151	10.5%	1.36 [1.01, 1.83]	
Kehoe, Poulin-Dubois, & Friend, 2021	0.087	0.172	8.1%	1.09 [0.78, 1.53]	
Oberg, 2020	0	0		Not estimable	
Parra, Hoff & Core 2011	0.4	0.162	9.1%	1.49 [1.09, 2.05]	
Sharp & Gathercole, 2013	0.321	0.154	10.1%	1.38 [1.02, 1.86]	
Summers et al., 2010	0.06	0.134	13.3%	1.06 [0.82, 1.38]	
Tuller et al., 2019	0	0		Not estimable	
Vaahtoranta et al., 2020	0.144	0.127	14.9%	1.15 [0.90, 1.48]	
Total (95% CI)			**100.0%**	**1.26 [1.15, 1.39]**	

Heterogeneity: Tau² = 0.00; Chi² = 5.09, df = 8 (P = 0.75); I² = 0%
Test for overall effect: Z = 4.75 (P < 0.00001)

0.02   0.1
Favours [experimental]

Forest plot of comparison: 1 Nonword repetition and language exposure, outcome: 1.4 NWR & current exposure.

Figure 9 (Analysis 1.4)

Funnel plot of comparison: 1 Nonword repetition and language exposure, outcome: 1.4 NWR & current exposure.

Figure 10 (Analysis 1.5)

Study or Subgroup	log[Odds Ratio]	SE	Weight	Odds Ratio IV, Random, 95% CI	Odds Ratio IV, Random, 95% CI
Antonijevic et al., 2019	-0.497	0.151	13.6%	0.61 [0.45, 0.82]	→
de Almeida et al., 2017	0.027	0.184	11.8%	1.03 [0.72, 1.47]	—
Farabolini et al., 2021	-0.241	0.25	8.8%	0.79 [0.48, 1.28]	—
Huls, 2017	0.173	0.151	13.6%	1.19 [0.88, 1.60]	
Kolak, 2020	-0.015	0.2	11.0%	0.99 [0.67, 1.46]	
Li'el, 2017	-0.185	0.205	10.7%	0.83 [0.56, 1.24]	—
Limacher, 2019	0.032	0.267	8.1%	1.03 [0.61, 1.74]	
Pérez-Navarro, Molinaro, & Lallier (2020)	0	0		Not estimable	
Summers et al., 2010	0.042	0.134	14.6%	1.04 [0.80, 1.36]	
Thordardottir & Juliusdottir, 2013	0.654	0.277	7.8%	1.92 [1.12, 3.31]	
Total (95% CI)			100.0%	**0.98 [0.80, 1.18]**	

Heterogeneity: Tau² = 0.05; Chi² = 19.17, df = 8 (P = 0.01); I² = 58%
Test for overall effect: Z = 0.24 (P = 0.81)

0.05   0.2
Favours [experiment

Forest plot of comparison: 1 Nonword repetition and language exposure, outcome: 1.5 NWR & Age of onset to a target language.

Figure 11 (Analysis 1.5)
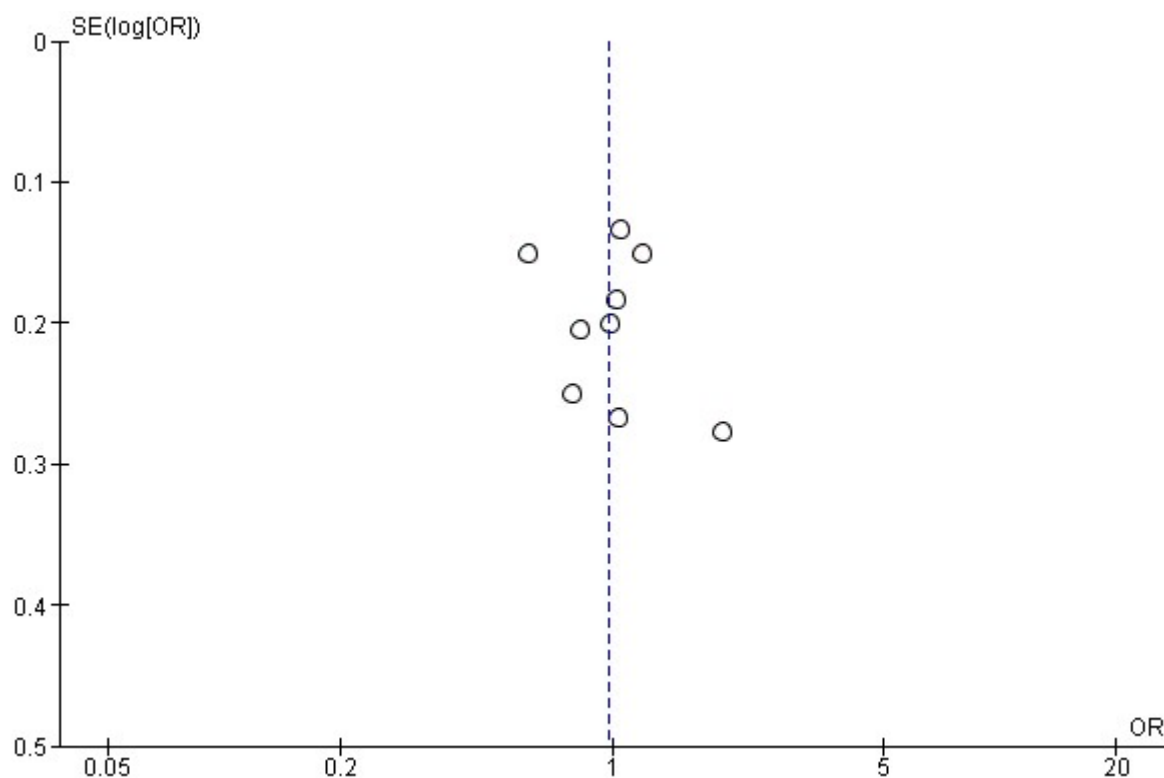
Funnel plot of comparison: 1 Nonword repetition and language exposure, outcome: 1.5 NWR & Age of onset to a target language.

Figure 13 (Analysis 1.14)

Funnel plot of comparison: 1 Nonword repetition and language exposure, outcome: 1.14 NWR & LE in schoolers and beyond.

Figure 14 (Analysis 1.7)

Study or Subgroup	log[Odds Ratio]	SE	Weight	Odds Ratio IV, Random, 95% CI	IV
Altman et al., 2014	0.304	0.127	5.7%	1.36 [1.06, 1.74]	
Antonijevic et al., 2019	-0.497	0.151	4.8%	0.61 [0.45, 0.82]	
Brandeker & Thordardottir, 2015	0.016	0.156	4.6%	1.02 [0.75, 1.38]	
Core, Chaturvedi & Martinez-Nadramia, 2017	0.06	0.099	7.0%	1.06 [0.87, 1.29]	
Duncan & Paradis, 2016	0.04	0.118	6.1%	1.04 [0.83, 1.31]	
Engel de Abreu et al., 2013	0.492	0.164	4.3%	1.64 [1.19, 2.26]	
Farabolini et al., 2021	0.016	0.25	2.4%	1.02 [0.62, 1.66]	
Gathercole & Masoura, 2005	0.282	0.114	6.3%	1.33 [1.06, 1.66]	
Gibson et al., 2015	0.313	0.143	5.1%	1.37 [1.03, 1.81]	
Huls, 2017	0.235	0.151	4.8%	1.26 [0.94, 1.70]	
Kehoe, Poulin-Dubois, & Friend, 2021	0.087	0.172	4.1%	1.09 [0.78, 1.53]	
Kolak, 2020	-0.015	0.2	3.4%	0.99 [0.67, 1.46]	
Li'el, 2017	-0.099	0.204	3.3%	0.91 [0.61, 1.35]	
Limacher, 2019	0.045	0.267	2.2%	1.05 [0.62, 1.77]	
Oberg, 2020	0.182	0.104	6.7%	1.20 [0.98, 1.47]	
Parra, Hoff & Core 2011	0.4	0.162	4.4%	1.49 [1.09, 2.05]	
Pérez-Navarro, Molinaro, & Lallier (2020)	0.065	0.125	5.8%	1.07 [0.84, 1.36]	
Reid, 2019	0.237	0.2	3.4%	1.27 [0.86, 1.88]	
Sharp & Gathercole, 2013	0.321	0.154	4.7%	1.38 [1.02, 1.86]	
Summers et al., 2010	0.051	0.134	5.4%	1.05 [0.81, 1.37]	
Vaahtoranta et al., 2020	0.208	0.127	5.7%	1.23 [0.96, 1.58]	
Total (95% CI)			**100.0%**	**1.15 [1.05, 1.25]**	

Heterogeneity: Tau² = 0.02; Chi² = 37.36, df = 20 (P = 0.01); I² = 46%
Test for overall effect: Z = 3.16 (P = 0.002)

Forest plot of comparison: 1 Nonword repetition and language exposure, outcome: 1.7 Language-like NWR & language exposure.
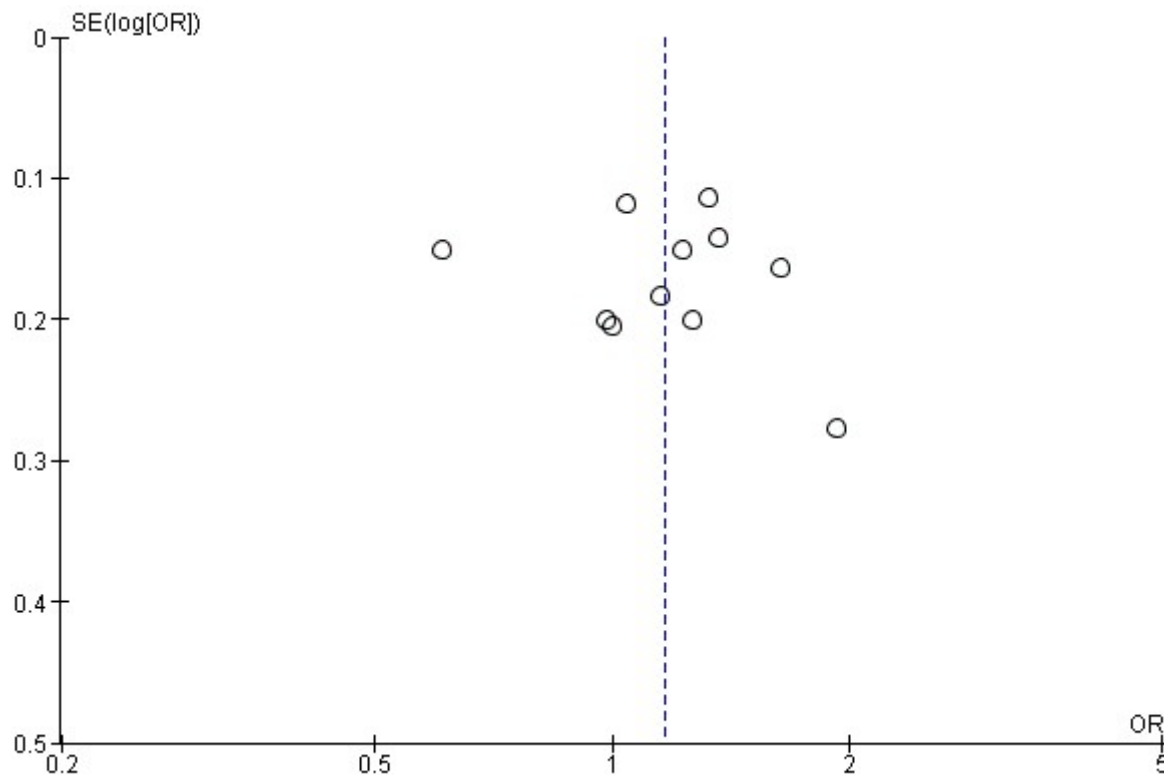
Figure 15 (Analysis 1.7)
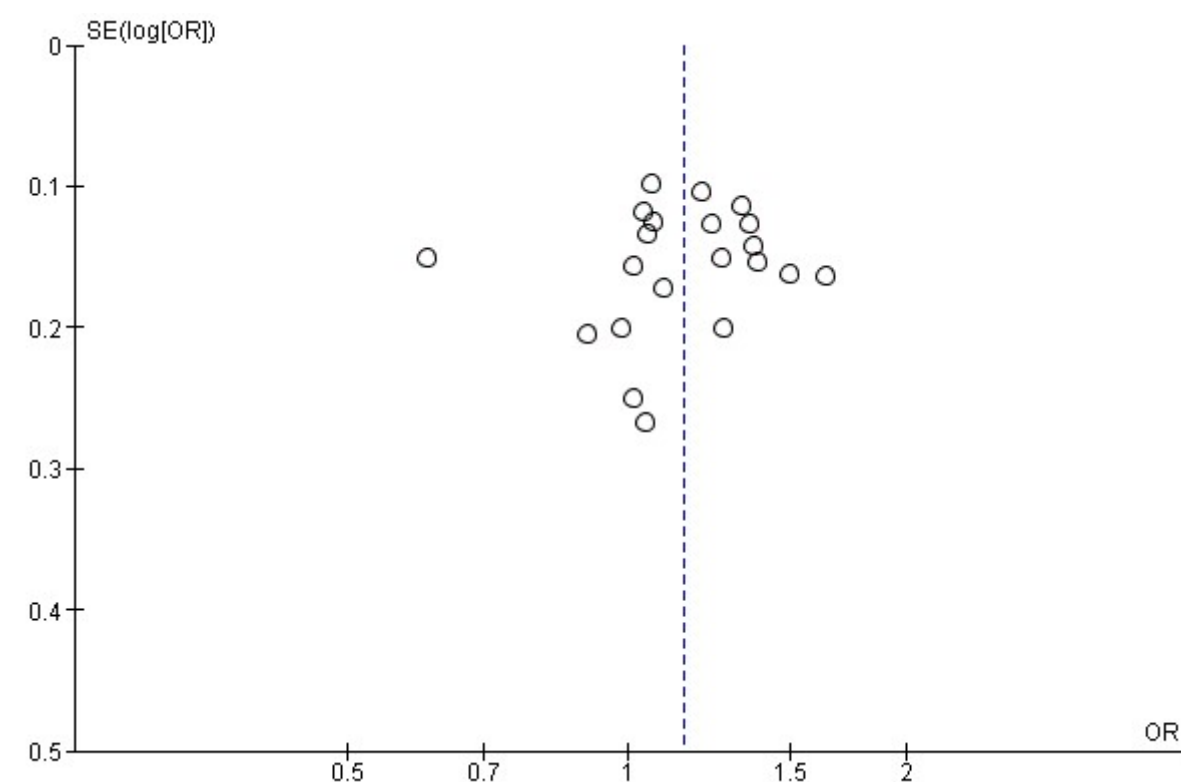
Funnel plot of comparison: 1 Nonword repetition and language exposure, outcome: 1.7 Language-like NWR & language exposure.

Figure 16 (Analysis 1.8)

Study or Subgroup	log[Odds Ratio]	SE	Weight	Odds Ratio IV, Random, 95% CI
Altman et al., 2014	0.304	0.127	7.6%	1.36 [1.06, 1.74]
Antonijevic et al., 2019	-0.497	0.151	6.5%	0.61 [0.45, 0.82]
Brandeker & Thordardottir, 2015	0.203	0.079	10.4%	1.23 [1.05, 1.43]
de Almeida et al., 2017	0.14	0.184	5.2%	1.15 [0.80, 1.65]
Duncan & Paradis, 2016	0.04	0.118	8.1%	1.04 [0.83, 1.31]
Engel de Abreu et al., 2013	0.492	0.164	5.9%	1.64 [1.19, 2.26]
Farabolini et al., 2021	0.045	0.25	3.4%	1.05 [0.64, 1.71]
Gathercole & Masoura, 2005	0.282	0.114	8.3%	1.33 [1.06, 1.66]
Kolak, 2020	-0.015	0.2	4.7%	0.99 [0.67, 1.46]
Li'el, 2017	0.002	0.205	4.5%	1.00 [0.67, 1.50]
Limacher, 2019	0.045	0.267	3.1%	1.05 [0.62, 1.77]
Oberg, 2020	0.136	0.103	9.0%	1.15 [0.94, 1.40]
Pérez-Navarro, Molinaro, & Lallier (2020)	0.065	0.125	7.7%	1.07 [0.84, 1.36]
Tuller et al., 2019	-0.023	0.121	8.0%	0.98 [0.77, 1.24]
Vaahtoranta et al., 2020	0.178	0.127	7.6%	1.19 [0.93, 1.53]
Total (95% CI)			100.0%	1.11 [1.00, 1.24]

Heterogeneity: Tau² = 0.02; Chi² = 30.31, df = 14 (P = 0.007); I² = 54%
Test for overall effect: Z = 2.00 (P = 0.05)

Forest plot of comparison: 1 Nonword repetition and language exposure, outcome: 1.8 LE & NWR with whole-word scoring.

Figure 17 (Analysis 1.8)

Funnel plot of comparison: 1 Nonword repetition and language exposure, outcome: 1.8 LE & NWR with whole-word scoring.

Figure 18 (Analysis 1.14)

Study or Subgroup	log[Odds Ratio]	SE	Weight	Odds Ratio IV, Random, 95% CI
Antonijevic et al., 2019	-0.497	0.151	9.8%	0.61 [0.45, 0.82]
de Almeida et al., 2017	0.14	0.184	8.6%	1.15 [0.80, 1.65]
Duncan & Paradis, 2016	0.04	0.118	11.1%	1.04 [0.83, 1.31]
Engel de Abreu et al., 2013	0.492	0.164	9.4%	1.64 [1.19, 2.26]
Gathercole & Masoura, 2005	0.282	0.114	11.3%	1.33 [1.06, 1.66]
Gibson et al., 2015	0.313	0.143	10.2%	1.37 [1.03, 1.81]
Huls, 2017	0.205	0.151	9.8%	1.23 [0.91, 1.65]
Kolak, 2020	-0.015	0.2	8.0%	0.99 [0.67, 1.46]
Li'el, 2017	0.002	0.205	7.9%	1.00 [0.67, 1.50]
Reid, 2019	0.237	0.2	8.0%	1.27 [0.86, 1.88]
Thordardottir & Juliusdottir, 2013	0.654	0.277	5.8%	1.92 [1.12, 3.31]
Total (95% CI)			**100.0%**	**1.17 [0.98, 1.38]**

Heterogeneity: Tau² = 0.05; Chi² = 31.04, df = 10 (P = 0.0006); I² = 68%
Test for overall effect: Z = 1.76 (P = 0.08)

Forest plot of comparison: 1 Nonword repetition and language exposure, outcome: 1.14 NWR & LE in schoolers and beyond.
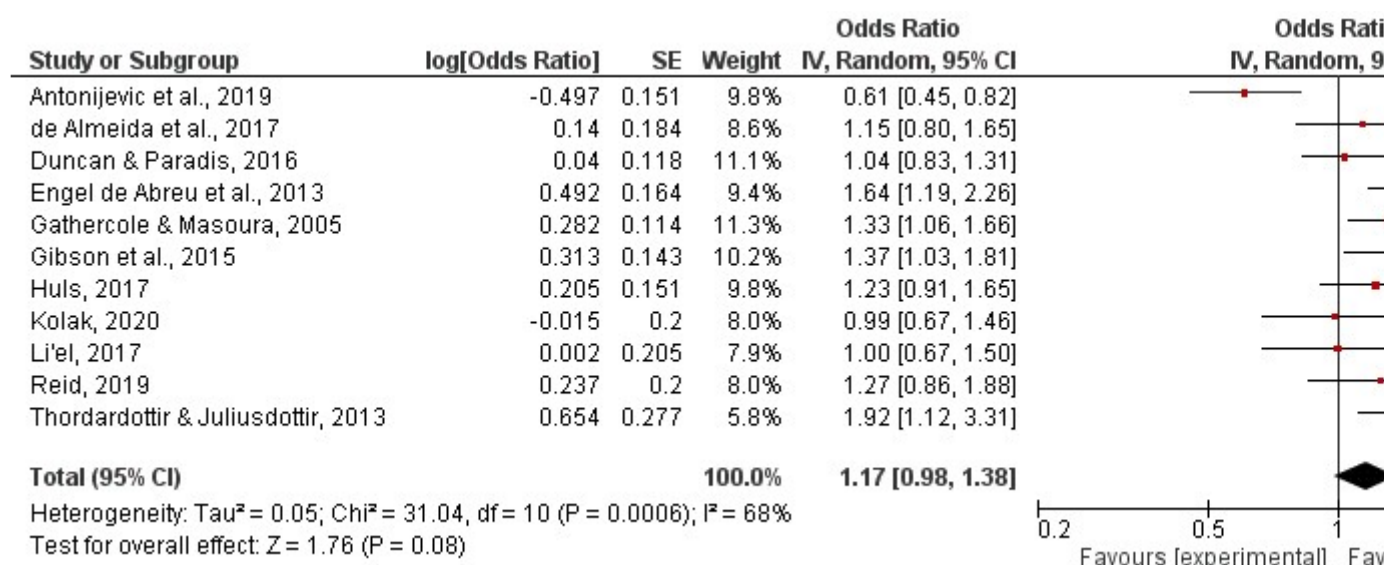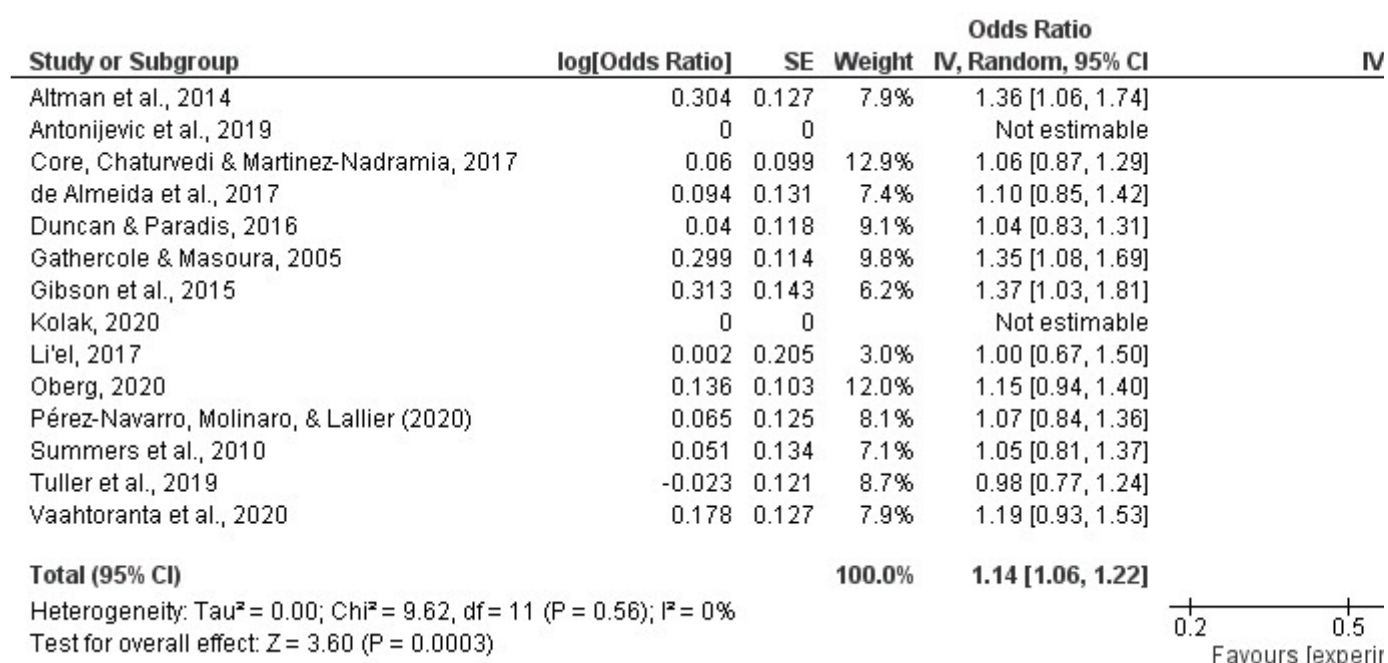
Figure 19 (Analysis 1.15)

Study or Subgroup	log[Odds Ratio]	SE	Weight	Odds Ratio IV, Random, 95% CI
Altman et al., 2014	0.304	0.127	7.9%	1.36 [1.06, 1.74]
Antonijevic et al., 2019	0	0		Not estimable
Core, Chaturvedi & Martinez-Nadramia, 2017	0.06	0.099	12.9%	1.06 [0.87, 1.29]
de Almeida et al., 2017	0.094	0.131	7.4%	1.10 [0.85, 1.42]
Duncan & Paradis, 2016	0.04	0.118	9.1%	1.04 [0.83, 1.31]
Gathercole & Masoura, 2005	0.299	0.114	9.8%	1.35 [1.08, 1.69]
Gibson et al., 2015	0.313	0.143	6.2%	1.37 [1.03, 1.81]
Kolak, 2020	0	0		Not estimable
Li'el, 2017	0.002	0.205	3.0%	1.00 [0.67, 1.50]
Oberg, 2020	0.136	0.103	12.0%	1.15 [0.94, 1.40]
Pérez-Navarro, Molinaro, & Lallier (2020)	0.065	0.125	8.1%	1.07 [0.84, 1.36]
Summers et al., 2010	0.051	0.134	7.1%	1.05 [0.81, 1.37]
Tuller et al., 2019	-0.023	0.121	8.7%	0.98 [0.77, 1.24]
Vaahtoranta et al., 2020	0.178	0.127	7.9%	1.19 [0.93, 1.53]
Total (95% CI)			**100.0%**	**1.14 [1.06, 1.22]**

Heterogeneity: Tau² = 0.00; Chi² = 9.62, df = 11 (P = 0.56); I² = 0%
Test for overall effect: Z = 3.60 (P = 0.0003)

Forest plot of comparison: 1 Nonword repetition and language exposure, outcome: 1.15 Representativeness of the exposed cohort (N>50).

Figure 20 (Analysis 1.10)

Study or Subgroup	log[Odds Ratio]	SE	Weight	Odds Ratio IV, Random, 95% CI
Altman et al., 2014	0.304	0.127	5.8%	1.36 [1.06, 1.74]
Brandeker & Thordardottir, 2015	0.127	0.155	4.1%	1.14 [0.84, 1.54]
Core, Chaturvedi & Martinez-Nadramia, 2017	0.06	0.099	8.7%	1.06 [0.87, 1.29]
de Almeida et al., 2017	0.094	0.131	5.5%	1.10 [0.85, 1.42]
Duncan & Paradis, 2016	0.04	0.118	6.6%	1.04 [0.83, 1.31]
Engel de Abreu et al., 2013	0.492	0.164	3.7%	1.64 [1.19, 2.26]
Farabolini et al., 2021	0.016	0.25	1.7%	1.02 [0.62, 1.66]
Gathercole & Masoura, 2005	0.282	0.114	6.9%	1.33 [1.06, 1.66]
Gibson et al., 2015	0.313	0.143	4.7%	1.37 [1.03, 1.81]
Huls, 2017	0.205	0.151	4.3%	1.23 [0.91, 1.65]
Kehoe, Poulin-Dubois, & Friend, 2021	0.087	0.172	3.4%	1.09 [0.78, 1.53]
Kolak, 2020	-0.015	0.2	2.6%	0.99 [0.67, 1.46]
Li'el, 2017	0.027	0.08	11.8%	1.03 [0.88, 1.20]
Limacher, 2019	0.045	0.267	1.5%	1.05 [0.62, 1.77]
Oberg, 2020	0.136	0.103	8.2%	1.15 [0.94, 1.40]
Parra, Hoff & Core 2011	0.4	0.162	3.8%	1.49 [1.09, 2.05]
Pérez-Navarro, Molinaro, & Lallier (2020)	0.065	0.125	6.0%	1.07 [0.84, 1.36]
Sharp & Gathercole, 2013	0.321	0.154	4.2%	1.38 [1.02, 1.86]
Summers et al., 2010	0.051	0.134	5.3%	1.05 [0.81, 1.37]
Thordardottir & Juliusdottir, 2013	0.654	0.277	1.4%	1.92 [1.12, 3.31]
Vaahtoranta et al., 2020	0	0		Not estimable
Total (95% CI)			100.0%	1.17 [1.10, 1.25]

Heterogeneity: Tau² = 0.00; Chi² = 22.05, df = 19 (P = 0.28); I² = 14%
Test for overall effect: Z = 4.78 (P < 0.00001)

Forest plot of comparison: 1 Nonword repetition and language exposure, outcome: 1.10 NWR & LE in children with typical language development.
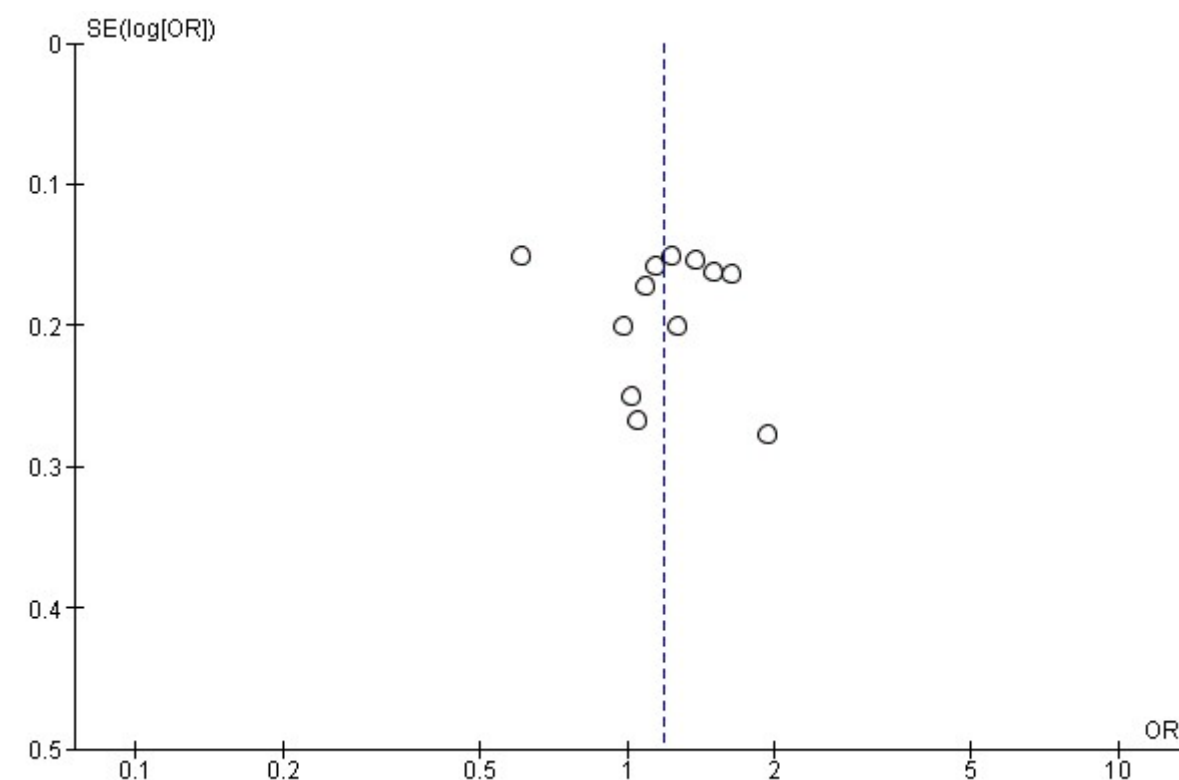
Figure 21 (Analysis 1.16)

Funnel plot of comparison: 1 Nonword repetition and language exposure, outcome: 1.16 Representativeness of the exposed cohort (N<50).
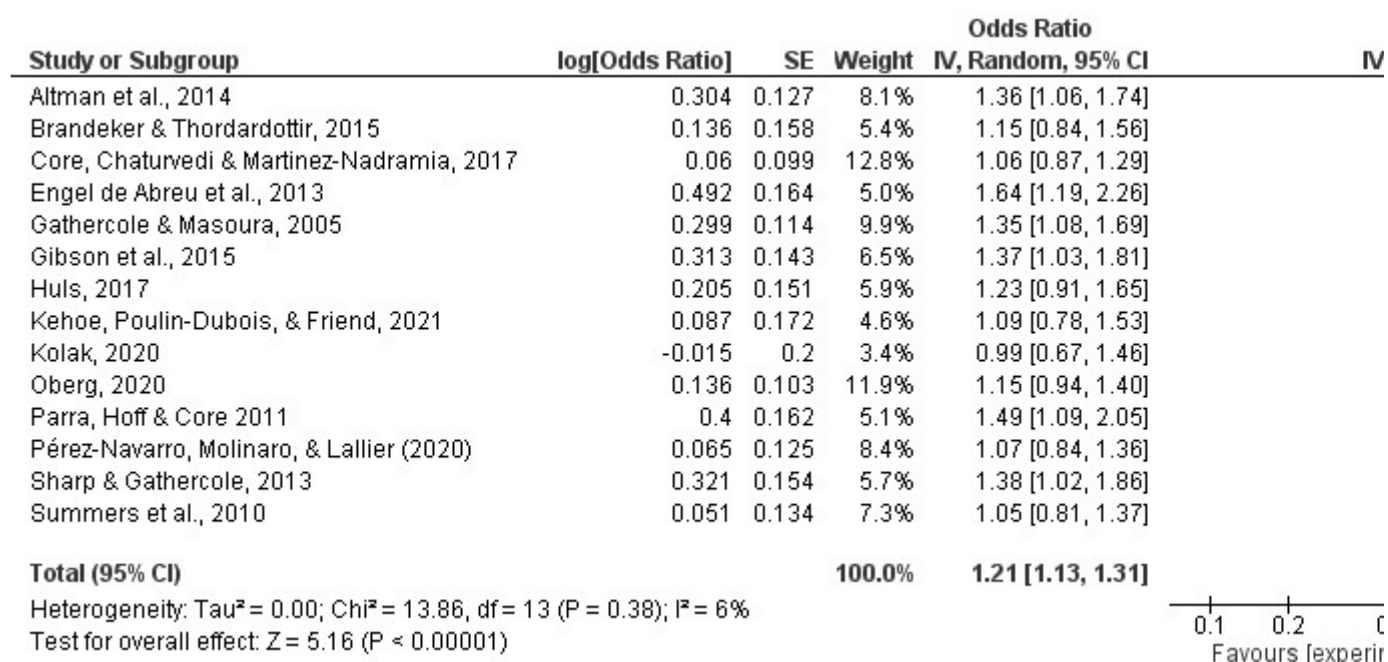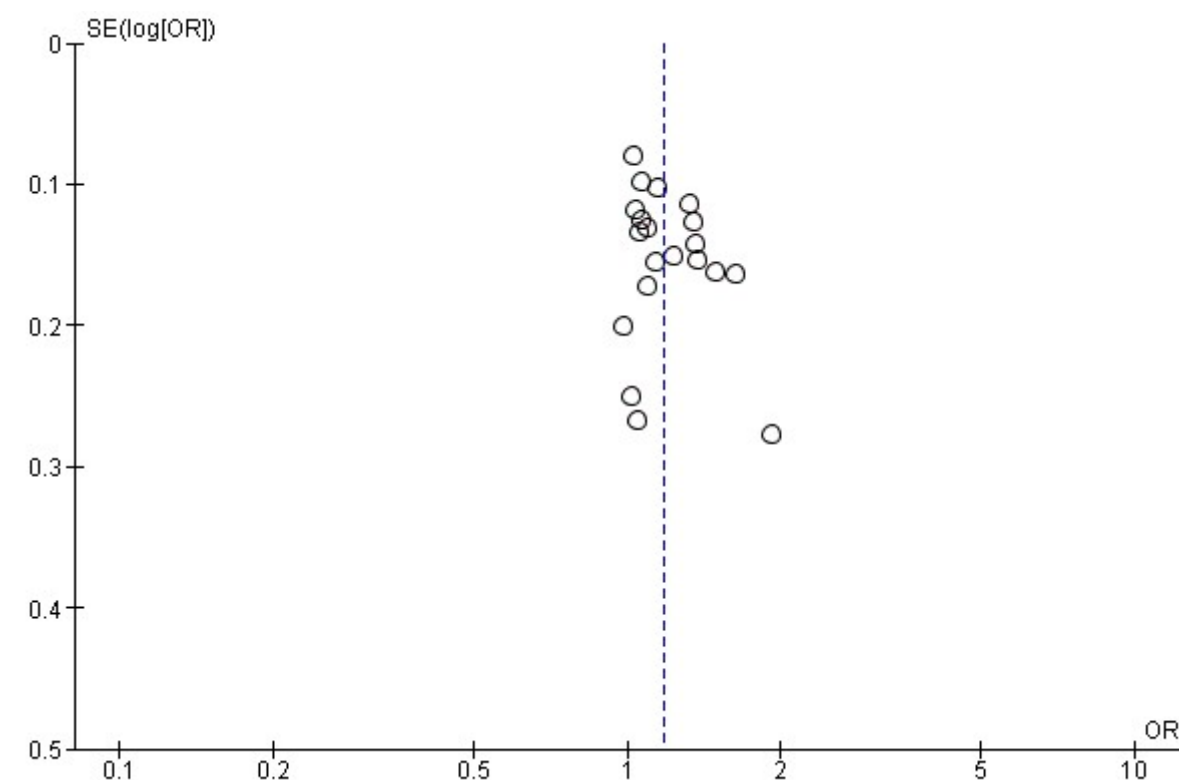
Figure 22 (Analysis 1.20)

Study or Subgroup	log[Odds Ratio]	SE	Weight	Odds Ratio IV, Random, 95% CI	IV
Altman et al., 2014	0.304	0.127	8.1%	1.36 [1.06, 1.74]	
Brandeker & Thordardottir, 2015	0.136	0.158	5.4%	1.15 [0.84, 1.56]	
Core, Chaturvedi & Martinez-Nadramia, 2017	0.06	0.099	12.8%	1.06 [0.87, 1.29]	
Engel de Abreu et al., 2013	0.492	0.164	5.0%	1.64 [1.19, 2.26]	
Gathercole & Masoura, 2005	0.299	0.114	9.9%	1.35 [1.08, 1.69]	
Gibson et al., 2015	0.313	0.143	6.5%	1.37 [1.03, 1.81]	
Huls, 2017	0.205	0.151	5.9%	1.23 [0.91, 1.65]	
Kehoe, Poulin-Dubois, & Friend, 2021	0.087	0.172	4.6%	1.09 [0.78, 1.53]	
Kolak, 2020	-0.015	0.2	3.4%	0.99 [0.67, 1.46]	
Oberg, 2020	0.136	0.103	11.9%	1.15 [0.94, 1.40]	
Parra, Hoff & Core 2011	0.4	0.162	5.1%	1.49 [1.09, 2.05]	
Pérez-Navarro, Molinaro, & Lallier (2020)	0.065	0.125	8.4%	1.07 [0.84, 1.36]	
Sharp & Gathercole, 2013	0.321	0.154	5.7%	1.38 [1.02, 1.86]	
Summers et al., 2010	0.051	0.134	7.3%	1.05 [0.81, 1.37]	
Total (95% CI)			**100.0%**	**1.21 [1.13, 1.31]**	

Heterogeneity: Tau² = 0.00; Chi² = 13.86, df = 13 (P = 0.38); I² = 6%
Test for overall effect: Z = 5.16 (P < 0.00001)
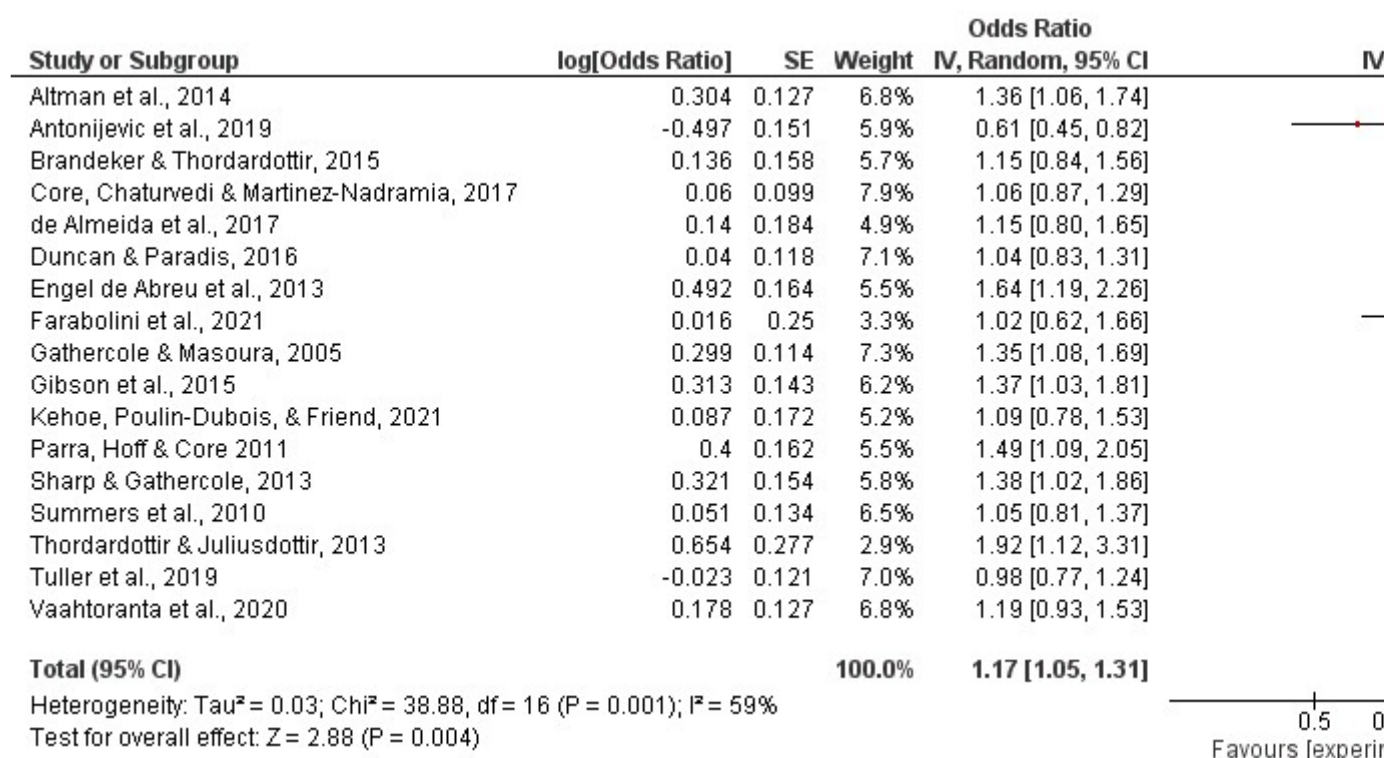
0.1   0.2   0
Favours [experir

Forest plot of comparison: 1 Nonword repetition and language exposure, outcome: 1.20 NWR & LE in samples with same languages spoken.
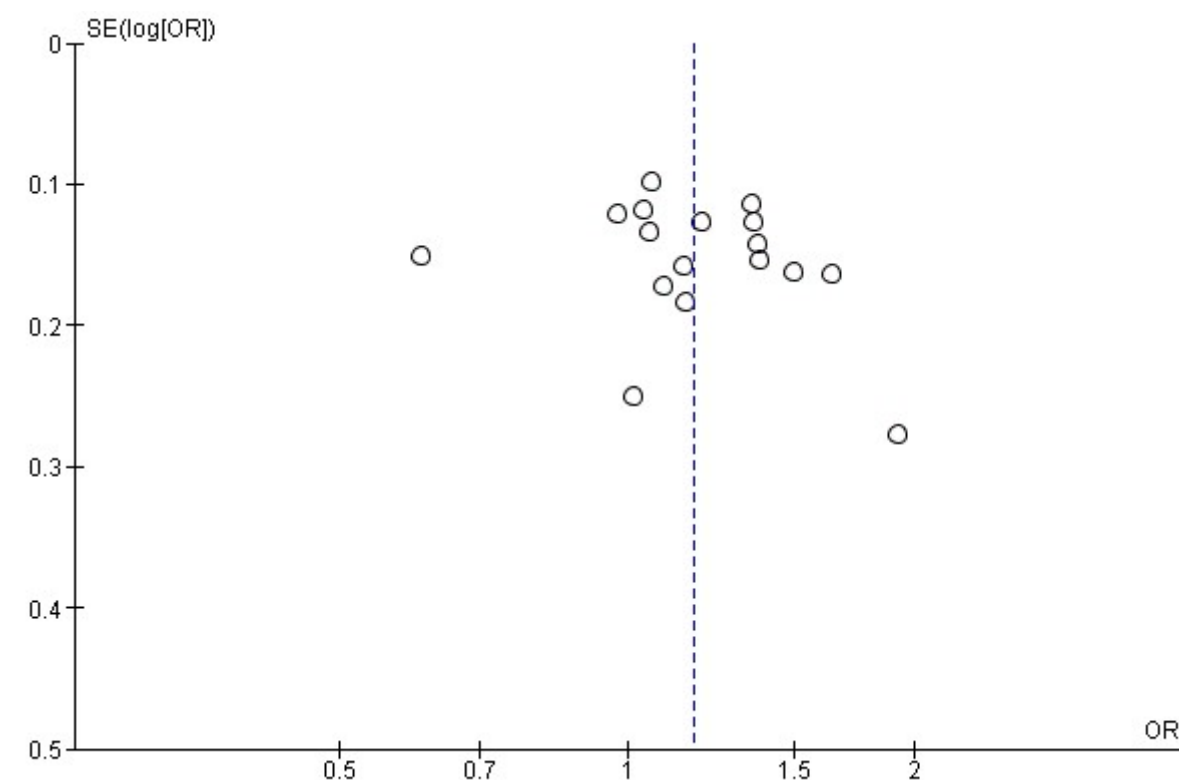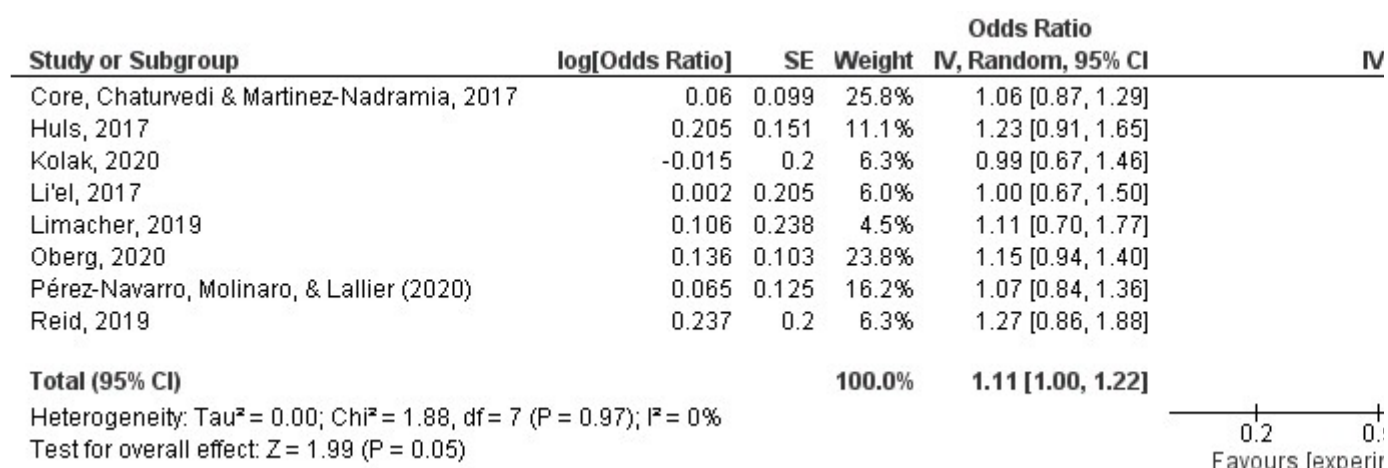
Figure 23 (Analysis 1.10)

Funnel plot of comparison: 1 Nonword repetition and language exposure, outcome: 1.10 NWR & LE in children with typical language development.

Figure 26 (Analysis 1.17)

Study or Subgroup	log[Odds Ratio]	SE	Weight	Odds Ratio IV, Random, 95% CI	IV
Altman et al., 2014	0.304	0.127	6.8%	1.36 [1.06, 1.74]	
Antonijevic et al., 2019	-0.497	0.151	5.9%	0.61 [0.45, 0.82]	
Brandeker & Thordardottir, 2015	0.136	0.158	5.7%	1.15 [0.84, 1.56]	
Core, Chaturvedi & Martinez-Nadramia, 2017	0.06	0.099	7.9%	1.06 [0.87, 1.29]	
de Almeida et al., 2017	0.14	0.184	4.9%	1.15 [0.80, 1.65]	
Duncan & Paradis, 2016	0.04	0.118	7.1%	1.04 [0.83, 1.31]	
Engel de Abreu et al., 2013	0.492	0.164	5.5%	1.64 [1.19, 2.26]	
Farabolini et al., 2021	0.016	0.25	3.3%	1.02 [0.62, 1.66]	
Gathercole & Masoura, 2005	0.299	0.114	7.3%	1.35 [1.08, 1.69]	
Gibson et al., 2015	0.313	0.143	6.2%	1.37 [1.03, 1.81]	
Kehoe, Poulin-Dubois, & Friend, 2021	0.087	0.172	5.2%	1.09 [0.78, 1.53]	
Parra, Hoff & Core 2011	0.4	0.162	5.5%	1.49 [1.09, 2.05]	
Sharp & Gathercole, 2013	0.321	0.154	5.8%	1.38 [1.02, 1.86]	
Summers et al., 2010	0.051	0.134	6.5%	1.05 [0.81, 1.37]	
Thordardottir & Juliusdottir, 2013	0.654	0.277	2.9%	1.92 [1.12, 3.31]	
Tuller et al., 2019	-0.023	0.121	7.0%	0.98 [0.77, 1.24]	
Vaahtoranta et al., 2020	0.178	0.127	6.8%	1.19 [0.93, 1.53]	
Total (95% CI)			**100.0%**	**1.17 [1.05, 1.31]**	

Heterogeneity: Tau² = 0.03; Chi² = 38.88, df = 16 (P = 0.001); I² = 59%
Test for overall effect: Z = 2.88 (P = 0.004)
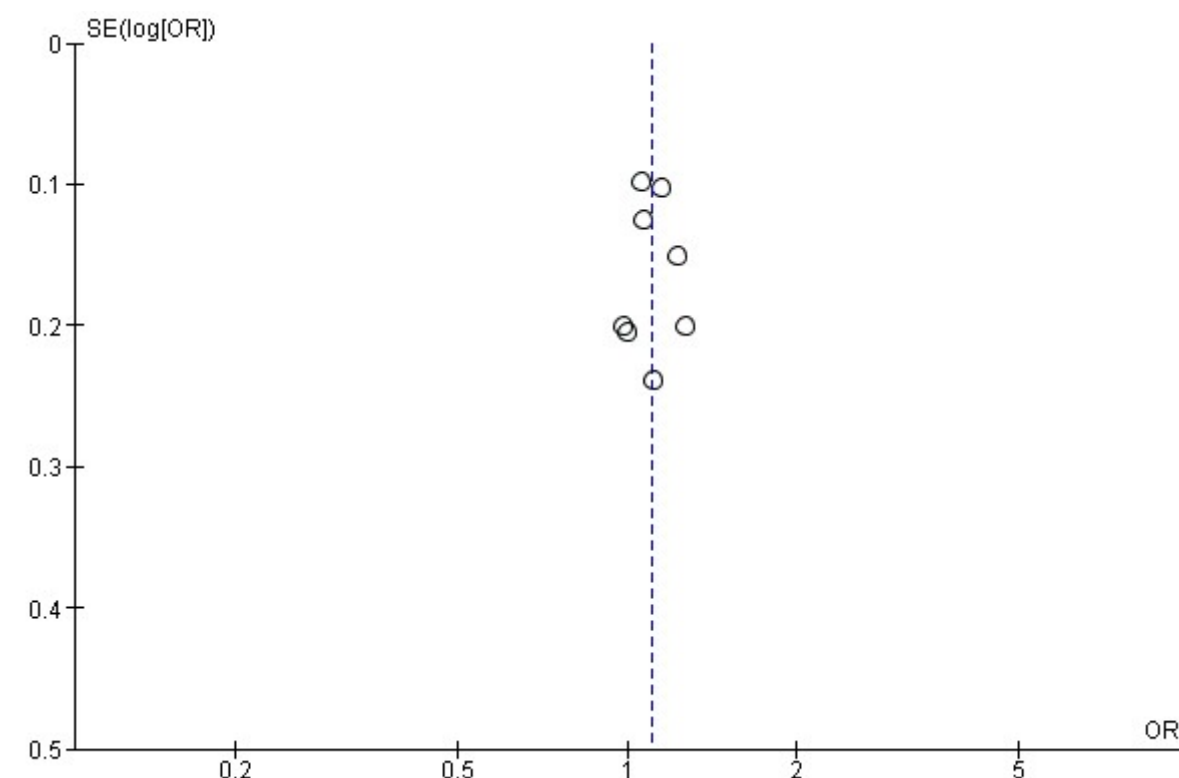
0.5   0
Favours [experir

Forest plot of comparison: 1 Nonword repetition and language exposure, outcome: 1.17 NWR & LE published data cleaned.
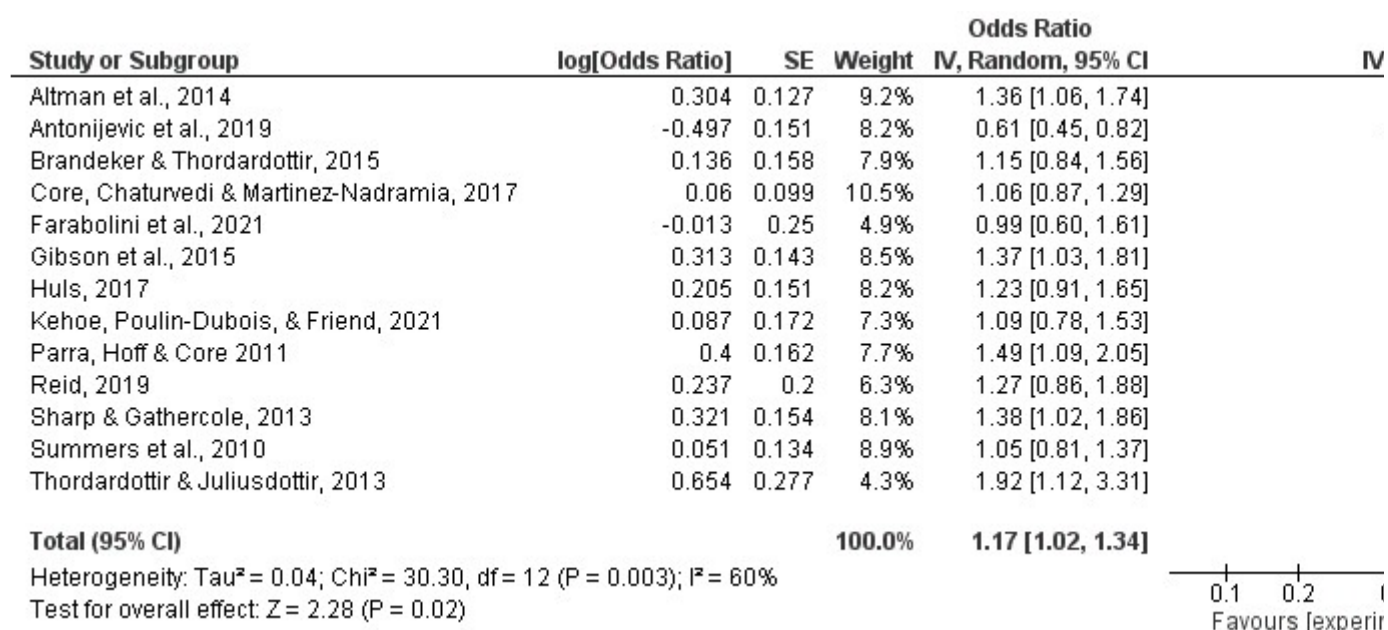
Figure 27 (Analysis 1.17)

Funnel plot of comparison: 1 Nonword repetition and language exposure, outcome: 1.17 NWR & LE published data cleaned.

Figure 28 (Analysis 1.18)

				Odds Ratio	
Study or Subgroup	log[Odds Ratio]	SE	Weight	IV, Random, 95% CI	IV
Core, Chaturvedi & Martinez-Nadramia, 2017	0.06	0.099	25.8%	1.06 [0.87, 1.29]	
Huls, 2017	0.205	0.151	11.1%	1.23 [0.91, 1.65]	
Kolak, 2020	-0.015	0.2	6.3%	0.99 [0.67, 1.46]	
Li'el, 2017	0.002	0.205	6.0%	1.00 [0.67, 1.50]	
Limacher, 2019	0.106	0.238	4.5%	1.11 [0.70, 1.77]	
Oberg, 2020	0.136	0.103	23.8%	1.15 [0.94, 1.40]	
Pérez-Navarro, Molinaro, & Lallier (2020)	0.065	0.125	16.2%	1.07 [0.84, 1.36]	
Reid, 2019	0.237	0.2	6.3%	1.27 [0.86, 1.88]	
Total (95% CI)			100.0%	1.11 [1.00, 1.22]	

Heterogeneity: Tau² = 0.00; Chi² = 1.88, df = 7 (P = 0.97); I² = 0%
Test for overall effect: Z = 1.99 (P = 0.05)

Forest plot of comparison: 1 Nonword repetition and language exposure, outcome: 1.18 NWR & LE unpublished data cleaned.
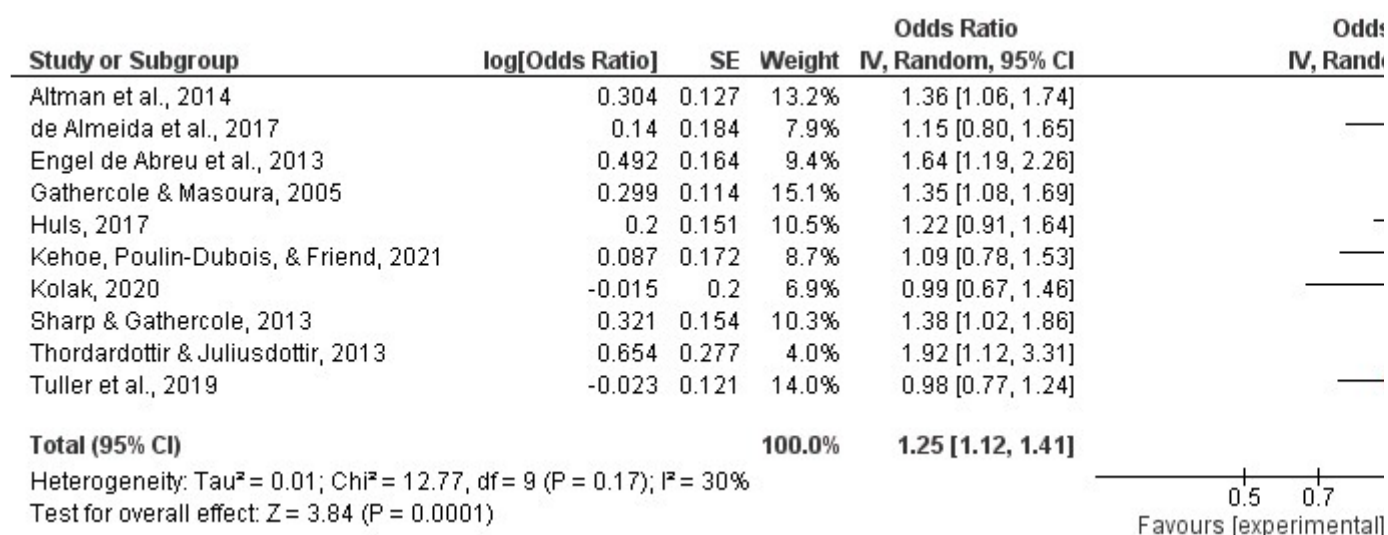
Figure 29 (Analysis 1.18)

Funnel plot of comparison: 1 Nonword repetition and language exposure, outcome: 1.18 NWR & LE unpublished data cleaned.

Figure 30 (Analysis 1.9)

Study or Subgroup	log[Odds Ratio]	SE	Weight	Odds Ratio IV, Random, 95% CI	IV
Altman et al., 2014	0.304	0.127	9.2%	1.36 [1.06, 1.74]	
Antonijevic et al., 2019	-0.497	0.151	8.2%	0.61 [0.45, 0.82]	
Brandeker & Thordardottir, 2015	0.136	0.158	7.9%	1.15 [0.84, 1.56]	
Core, Chaturvedi & Martinez-Nadramia, 2017	0.06	0.099	10.5%	1.06 [0.87, 1.29]	
Farabolini et al., 2021	-0.013	0.25	4.9%	0.99 [0.60, 1.61]	
Gibson et al., 2015	0.313	0.143	8.5%	1.37 [1.03, 1.81]	
Huls, 2017	0.205	0.151	8.2%	1.23 [0.91, 1.65]	
Kehoe, Poulin-Dubois, & Friend, 2021	0.087	0.172	7.3%	1.09 [0.78, 1.53]	
Parra, Hoff & Core 2011	0.4	0.162	7.7%	1.49 [1.09, 2.05]	
Reid, 2019	0.237	0.2	6.3%	1.27 [0.86, 1.88]	
Sharp & Gathercole, 2013	0.321	0.154	8.1%	1.38 [1.02, 1.86]	
Summers et al., 2010	0.051	0.134	8.9%	1.05 [0.81, 1.37]	
Thordardottir & Juliusdottir, 2013	0.654	0.277	4.3%	1.92 [1.12, 3.31]	
Total (95% CI)			100.0%	1.17 [1.02, 1.34]	

Heterogeneity: Tau² = 0.04; Chi² = 30.30, df = 12 (P = 0.003); I² = 60%
Test for overall effect: Z = 2.28 (P = 0.02)

Forest plot of comparison: 1 Nonword repetition and language exposure, outcome: 1.9 LE & NWR with phoneme scoring.

Figure 32 (Analysis 1.31)
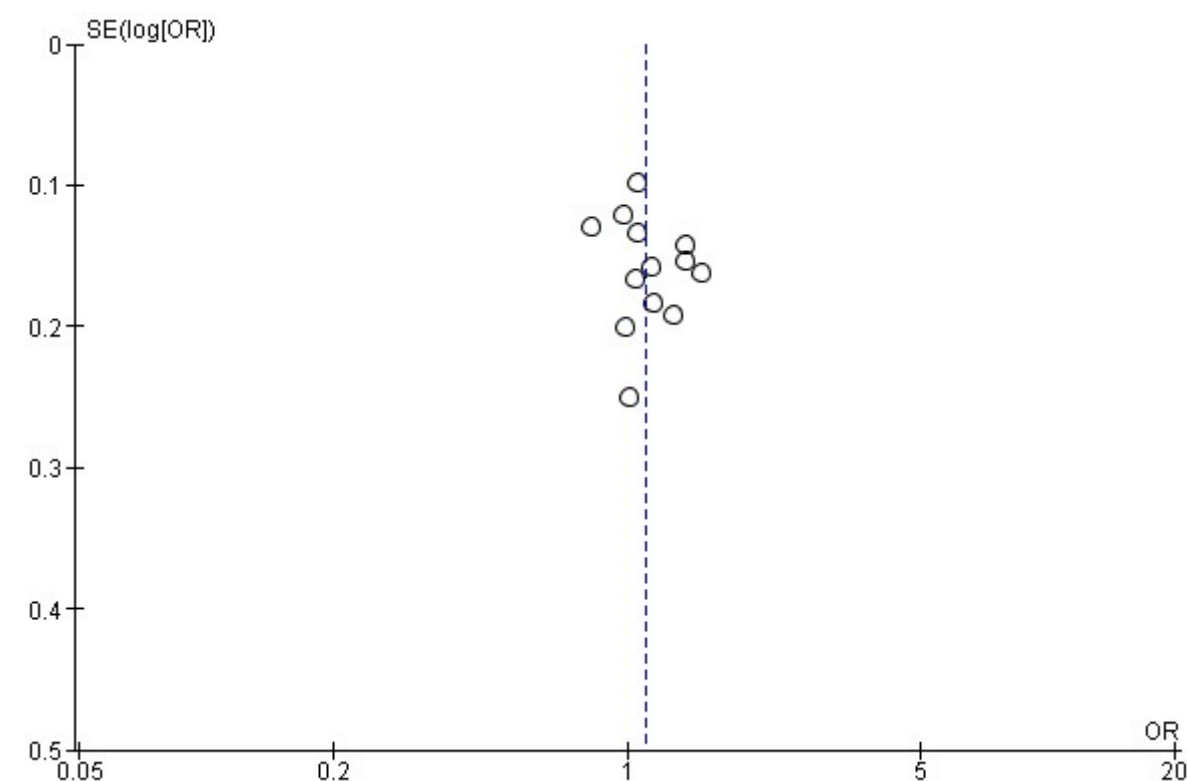
Funnel plot of comparison: 1 Nonword repetition and language exposure, outcome: 1.31 Non-words' syllabic range between 3 and 2, excluding 6-syllabic nonwords and above.

Figure 33 (Analysis 1.29)

Study or Subgroup	log[Odds Ratio]	SE	Weight	Odds Ratio IV, Random, 95% CI	Odds IV, Rand
Altman et al., 2014	0.304	0.127	13.2%	1.36 [1.06, 1.74]	
de Almeida et al., 2017	0.14	0.184	7.9%	1.15 [0.80, 1.65]	—
Engel de Abreu et al., 2013	0.492	0.164	9.4%	1.64 [1.19, 2.26]	
Gathercole & Masoura, 2005	0.299	0.114	15.1%	1.35 [1.08, 1.69]	
Huls, 2017	0.2	0.151	10.5%	1.22 [0.91, 1.64]	
Kehoe, Poulin-Dubois, & Friend, 2021	0.087	0.172	8.7%	1.09 [0.78, 1.53]	—
Kolak, 2020	-0.015	0.2	6.9%	0.99 [0.67, 1.46]	—
Sharp & Gathercole, 2013	0.321	0.154	10.3%	1.38 [1.02, 1.86]	
Thordardottir & Juliusdottir, 2013	0.654	0.277	4.0%	1.92 [1.12, 3.31]	
Tuller et al., 2019	-0.023	0.121	14.0%	0.98 [0.77, 1.24]	—
Total (95% CI)			100.0%	**1.25 [1.12, 1.41]**	

Heterogeneity: Tau² = 0.01; Chi² = 12.77, df = 9 (P = 0.17); I² = 30%
Test for overall effect: Z = 3.84 (P = 0.0001)

0.5   0.7
Favours [experimental]

Forest plot of comparison: 1 Nonword repetition and language exposure, outcome: 1.29 amount of nonwords higher than 40.

Figure 38 (Analysis 1.29)
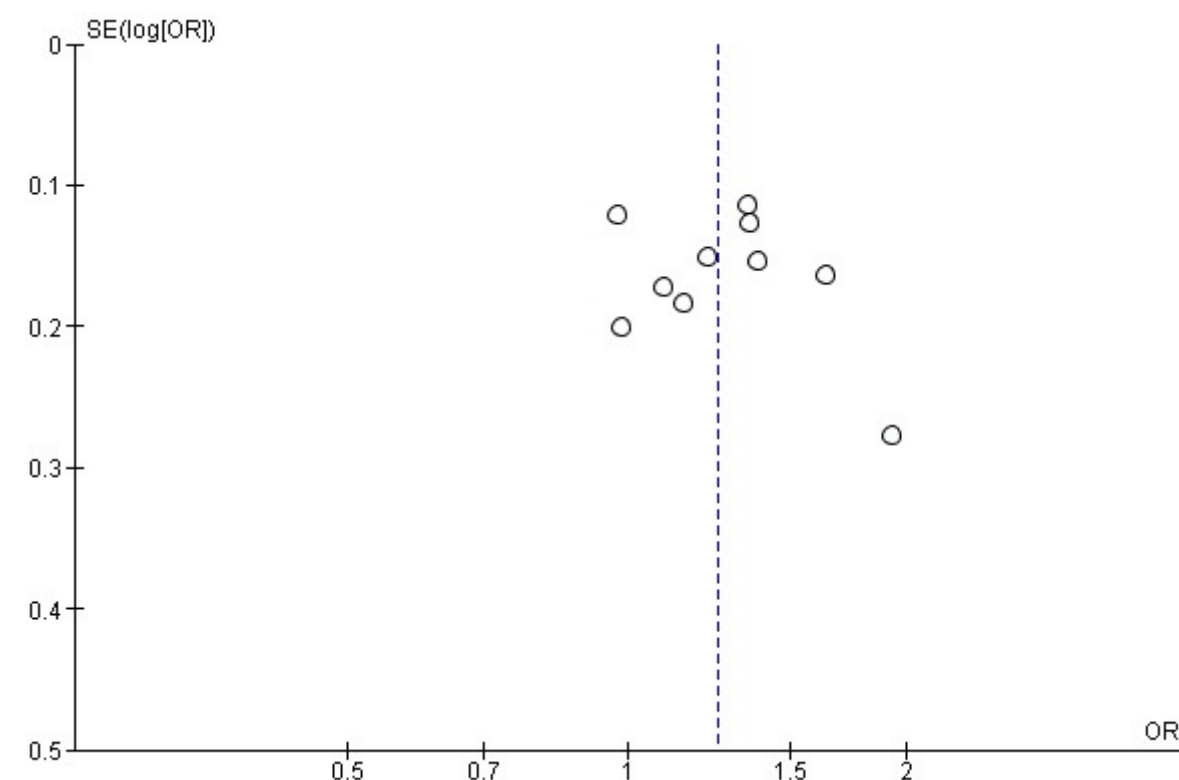
Funnel plot of comparison: 1 Nonword repetition and language exposure, outcome: 1.29 amount of nonwords higher than 40.

Sources of support

Internal sources

- No sources of support provided

External sources

- No sources of support provided

Feedback

Appendices